

CSE 4251: Lab 2

Due Date: Oct 9 11:59PM

Overview

These exercises will allow you to have some practice with the Unix/Linux environment, regex (**Regular Expressions**), commands and basic concepts.

Objectives

- Get familiar with the system working environment and basic commands
- Get familiar with Regular Expressions (RE) and grep command
- Review commonly used Unix/Linux commands

Instructions

Create a new folder named Lab02 in your UNIX working directory. The exercises below should all be created within that new folder.

Exercise 1 Description

Start by importing the file *peopleonEarth.txt* from Carmen. Be sure to get rid of any MS-Windows characters that the file may have, use the *dos2unix* command (type *man dos2unix* to find out more about the command).

Write a statement with the grep command and regular expressions to find the given pattern for each one of the cases on the following list. Hint: try each one of statements in the command line; once you get it working correctly add it to a text file called *Lab2_1.txt* to be included in the submission:

1. Try this on the command line and explain what it is doing: `grep 'hom.*ds' p* [1]`
2. Print all lines containing the expression "70" in " peopleonEarth.txt " [1]

3. Print all lines beginning with a “t” or “T”
4. Print all lines ending with a “4”
5. Print all lines containing “people”
6. Print all lines containing the number “4”
7. Print all lines containing the number “4” followed by a comma “,”
8. Print all lines containing the expression “,4”
9. Print all lines containing the number “4” followed by a comma “,” and any single character
10. Print all lines beginning with either an “I” or a “T”
11. Print all lines containing one non-digit
12. Print all lines containing digits followed by a space and a capital letter
13. Print all lines containing an “s” followed by zero or more consecutive occurrences of the letter “s” and a space.
14. Print all lines containing at least nine consecutive lowercase letters (i.e. northeast)
15. Print all lines containing a word starting with “human”
16. Print all lines if they contain the word “million”
17. Print all lines containing a word starting with a lowercase letter and followed by any number of characters and ending with “t”

Exercise 2 Description

In this exercise you are going to examine Grep with options.

1. Print all lines beginning with either an “I” or a “T” and try in this case to execute the *grep* command with each one of the following options (individually, not all of them at the same time): -n, -i, -l, -c, -w. What’s the result for each one?
2. Print all lines if they contain the word “million” and try in this case to execute the *grep* command with each one of the following options (individually, not all of them at the same time): -v, -l, -w.

When you have it working correctly, use the **command *script* to save the evidence and submit it.**
Name that file *Lab2_2.txt*

Submission Instructions

To submit, create a single zip file named with the format of **Lab2.zip** that contains the two files **Lab2_1.txt** and **Lab2_2.txt**. Points will be deducted for extra files and incorrect naming of the zip file.